

Similarity and Helping Behavior on the Web: The Impact of the Convergence of Surnames Between a Solicitor and a Subject in a Request Made by E-Mail¹

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Similarity between a solicitor and a subject traditionally enhances helping behavior. An experiment was carried out in a computer-mediated context. Fifty students received an e-mail containing a 40-question survey on their food habits, which required 15 to 20 min of their time to respond. This questionnaire came from a hypothetical student of the university in which the participants were registered. In half of the cases, the surname of the solicitor, which appeared in his or her electronic address, was the same as the surname of the target. Results show that compliance to the request was significantly higher in the same-surname condition than in the different-surname condition. The response delay was significantly shorter in the same-surname condition than in control condition.

Research on helping behavior has shown that when a solicitor seems to be familiar to the subject who is solicited, he or she agrees more favorably to help the solicitor. In these studies, similarity was manipulated in various ways: congruence versus no congruence of race, status, apparel appearance, or attitudes between the solicitor and the person solicited. A solicitor was helped more favorably when he or she was of the same race as the subject (Bickman & Kamzam, 1973; Gaertner & Bickman, 1971; Wegner & Crano, 1975). The same effect was obtained when the solicitation of help was made by telephone and when ethnicity was manipulated by the accent of the solicitor (Harris & Klingbeil, 1976).

High-status people are more likely to help a high-status solicitor who needs help than a low-status solicitor (Goodman & Gareis, 1993). Keasey and Keasey (1971) found that same-apparel appearance between helper and solicitor led to increased compliance to the solicitor's request. This effect also has been

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observed in spontaneous helping behavior (Suedfeld, Bochner, & Matas, 1971). Attitude congruence with regard to capital punishment between a solicitor and a person solicited is a factor influencing helping behavior (Karabenick, Lerner & Beecher, 1975). In the same vein, Suedfeld, Bochner, and Wnek (1972) found that similar political attitudes increased altruism.

Methodologically speaking, most of the studies on the effect of similarity on helping behavior have used face-to-face or telephone interaction between the solicitor and the person being solicited. Results have shown that the physical presence of the solicitor is not required to create this similarity. For this reason, it seems useful to test if this similarity effect could be obtained in a computer-mediated interaction where social information is scarce. In spite of appearances, an e-mail message sent by a stranger to an Internet user is a situation in which similarity could be introduced by various information. The surname contained in the first part of an electronic address is information that could have an impact on the receiver. Numerous studies have shown that a surname has some psychological effects on its bearer (Colman, Sluckin, & Hargreaves, 1981). Intons-Peterson and Crawford (1985) found that a surname is an important part of self-identity.

It is well known that requests by questionnaires of all kinds are being developed, thanks to the Internet, and numerous Internet users reach a level of saturation for these requests (Zhang, 2000). It becomes interesting, therefore, to study the impact of this technique of similarity as part of communication with the computer as a medium. Taking into account the convincing efficacy of this technique clearly demonstrated in the studies mentioned previously, it is expected that when the solicitor has the same surname as the subject solicited via an e-mail, this similarity will predispose him or her to give his or her consent more easily to the solicitor's request.

Method

Participants

The participants were 52 students (27 female, 25 male) in their first year of management at the University of Bretagne-Sud in France. The participants were recruited at the moment of their Internet connection on a free-to-use workstation at the university. The experiment took place after 5:30 p.m. to be sure that the participants were not in class. Because they logged out during the time assigned to the experiment, 2 participants (both female) were eliminated from the experiment.

Procedure

Different electronic addresses were created for the occasion, containing the name of a server in another part of the university in the same town. Moreover, the

e-mails that were sent to participants contained a signature showing that the sender of the e-mail was a student in statistics at the same university. The participants were randomly placed in the experimental condition or in the control situation.

Two male investigators were used in the experiment. One of them was situated in the same building as the participant and was able to check to see if the participant was connected and if he had the corresponding profile. He then transferred the participant's address to his collaborator, who consulted a random allocation list. According to the order of the participant, allocation to the experimental condition or to the control situation took place. The collaborator then took care of sending the message. The second investigator was located in a laboratory in another building. In both conditions, an e-mail message was sent to the participant as follows:

Hi, I don't want to take advantage, but could you help me? Well, with 3 of my study friends we have to perform a statistical analysis of the diet habits of students. For this, we will have to analyze a questionnaire, and we will be evaluated on the analysis of the collected data. Would you accept to answer to the questionnaire? Just in case, I have attached an HTML form to my e-mail that you will have to send back by clicking on the send button at the end of the form. Thanks in advance, and have a nice day.

This request was chosen for the sufficient effort it required. A preliminary test showed that 15 to 20 min were needed to fill out the questionnaire containing 40 questions like the following: (a) How many times per week do you eat fresh vegetables? (b) What type of drink do you normally take with your lunch? beer, wine, soda, fizzy or flat water? Such a request seemed to be in accordance with the training of the senders, who were supposed to be students in statistics.

In the university where the experiment took place, electronic addresses of the students were created by using the first letter of the given name, followed by the complete surname, and then followed by the academic department (e.g., X.Surname@departement.server.fr). In the experimental condition, the surname employed to create the electronic address of the solicitor was the same as the surname of the student target. In the control condition, five familiar French surnames (*Martin, Durand, Rivière, Le Gal, and Gautier*) were employed to create the electronic addresses, but in each case, the surname employed was quite different from the surname of the target. In all cases, the first letter of the electronic address corresponding to the first letter of the solicitor's given name was different from the first letter of the given name of the target.

The return rate of the questionnaire was then measured, and a delay of a maximum of 7 days was allowed before declaring a no-response. The response time, measured in min, was also taken into account as a dependent variable.

Results

On all measures employed in this study, no differences were found between male and female scores. Therefore, the data for both genders were collapsed. Concerning the compliance rate to the request (completing the questionnaire and sending it back), 96% (24 out of 25) in the experimental situation did send back the completed questionnaire, compared to 52% (13 out of 25) in the control situation. The difference between these two rates was significant, $\chi^2(1, N = 50) = 10.40, p < .005$, with Yates' correction.

When the helper and the solicitor had the same surname, this led participants to comply more easily with the request. The latency time for answering was initially calculated in minutes. Considering the fact that some participants waited 1 to 4 days before answering (1 day = 1,440 minutes), a log-transformation of these periods was made. The mean value of the latency time of 1.51 ($SD = 0.94$) was found for the experimental condition, compared to 2.29 ($SD = 1.07$) for the control situation. Again, the difference between these two means was statistically significant, $t(35) = 2.30, p < .03$, two-tailed. The experimental condition in which the helper and solicitor had the same surname led to a quicker response time for the participants who agreed to respond.

Discussion

The present study showed that the convergence of surnames between receiver and transmitter led to increased compliance with the solicitor's request and decreased latency time of the participant's response. Earlier studies have shown that the physical presence of the solicitor is not necessary to guarantee compliance with a request. It appears now that this presence does not even necessitate a synchronous communication between the applicant and the target of his or her request. This electronic similarity turns out to be as effective as being in a situation in which the interaction is synchronous (face to face or by telephone). Again, these results confirm the efficacy of similarity between the helper and the solicitor on helping behavior, and congruence of a surname appears to be a good technique to create similarity in a context in which classical similarity techniques are difficult to manipulate.

The findings of the present study should be interpreted cautiously, given its preliminary nature. Of course, such results must be replicated with other participants. In our experiment, a hypothetical student asked a student to help him or her. Furthermore, the e-mail message sent to the participant contained a signature showing that the sender of the message was a student in statistics in the same university as the participant. Perhaps that is the reason why the compliance percentages in the two conditions were high (52% in control condition).

Solidarity with another student who needed help could explain these high percentages. What would happen if the solicitation were addressed to someone on

the Internet who is not a student? What would happen if no information about the sender was contained in the e-mail message? Guéguen and Jacob (2002), by manipulating the status of the solicitor via his or her electronic signature (a scientist for the high-status condition or an undergraduate student for the mid-status condition), found that high status led to increased compliance with a request for help on the Internet. Furthermore, when the target of the solicitation was a student, the rate of compliance was dramatically higher than when the target was someone on the Web (65% in the control condition with student participants vs. 7% in the control condition with another population). Perhaps the same effect would have occurred if the technique of similarity employed in this experiment were used with another population. These are interesting questions for future research to address.

The high rate of compliance in the experimental condition is perhaps explained by the importance of the surname for the self (Intons-Peterson & Crawford, 1985), particularly in a situation in which no other information on the solicitor is available and could interfere with the surname. Additional research is needed to assess the extent to which these preliminary findings with students as participants generalize to other groups. So, given the particularity of the social interaction between the solicitor and the solicitee in this experiment, the findings can be generalized to other mundane situations.

Our experiment shows that despite the scarcity of social information in computer-mediated context, it is possible to create a similarity between two correspondents in an e-mail interaction. It would be interesting for further research to test other factors of similarity, such as given names, information about status, and physical attractiveness (photography). It would be interesting to test helping behavior with the surname congruence technique in other contexts (e.g., e-mail interaction between two correspondents with the same surname, but living in different countries).

From a practical perspective, our results show that this form of similarity manipulated in a computer-mediated context could enhance favorably the rate of compliance with a survey request. Zhang (2000) found that Internet users showed a certain saturation for these requests and that response rates were lower. In a previous study, we found that an "electronic foot-in-the-door" was a good compliance technique on the Internet (Guéguen, 2002). It seems that the technique of surname similarity is a new technique for compliance on the Internet. This could be a good technological method to obtain higher response rates on Web surveys and then to increase sample representativeness. For now, these results must be replicated in different computer-mediated communication contexts.

Of course, such results raise ethical questions because it is very easy to create automatically an address that contains the same surname as the surname of the target. Then, it would be easy for Web marketers to use this technique with their mailing lists in order to increase the response rate to a survey or to influence

consumer behavior. Using this technique then would be assimilated to a business manipulation.

In the present experiment, participants were deceived by the method employed, particularly in the condition using identical surnames. However, because of the new context in which this effect of familiarity was studied (i.e., the Internet in this case), it was difficult to use a method of role-playing simulation, as recommended by previous research (Geller, 1978; O'Leary, Willis, & Tomich, 1970). Perhaps with the Internet, using role-playing could have some ethical advantages, given the scarcity of social information in this context. Social psychologists will thus have to discuss the ethics of the experiments conducted in this new context.

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